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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,371	08/19/2003	Douglas E. Ivers	IR-2966(ES)	4839

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LORD CORPORATION  
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CARY, NC 27512

EXAMINER
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KRAMER, DEVON C

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/643,371

Applicant(s)

IVERS ET AL.

Examiner

Devon C. Kramer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 2, 5, 15 and 22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 4 and 6-11 is/are allowed.
- 6) ☒ Claim(s) 12 14 16-21, 23-28 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

- 1) Claims 1-2, 3-4, 6-14, 16-21, 23-27 are objected to because of the following informalities:

Claim 1 lines 8 and 9, claim 11 lines 2 and 3, claim 12 lines 7 and 8, claim 19 lines 2 and 3, claim 20 lines 7 and 8 recite "said inner wall" which should be --said inner housing wall-- . Please note that this occurs throughout the claims and the application should be amended to maintain consistent language;

Claim 1 line 10, claim 12 line 9, claim 20 line 9, and claim 28 line 15, "the stroke direction" should be --a stroke direction--;

Claim 20 line 15, "said wall" should be --said inner housing wall-- Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

- 2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 3) Claims 1-2, 3-4, 6-9, 11-14, 16-21, 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (4881723) in view of Imaizumi (4503951).

In re claim 12, Bauer et al discloses a pneumatic endstop surface effect damper, said pneumatic endstop surface effect damper comprised of an air piston housing 1 with

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an air piston inner housing wall defining an air piston inner chamber 9, an air piston 7 movable in an up stroke first direction and an opposite down stroke second direction inside said air piston housing and along said air piston inner housing wall, said air piston dividing said air piston inner chamber into a first upper variable volume chamber and a second lower variable volume chamber, said air piston including a lubricated viscous elastomer surface effect damper 16 which engages said inner wall and provides a surface effect damping of the piston moving along said inner wall, said air piston including a movable valve system (13) actuated by a change in the stroke direction of said air piston. Bauer provides a valve system that releases air pressure from the upper chamber when the piston moves on the up stroke, but lacks a valve system that totally releases the pressure from the lower chamber on the down stroke.

Imaizumi teaches a valve arrangement wherein said movable valve system releases an air pressure from said upper variable volume chamber when said piston changes from said up stroke first direction to said opposite down stroke direction and releases an air pressure from said lower variable volume chamber when said piston changes from said down stroke direction to said up stroke direction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the damper of Bauer et al with a valve arrangement as taught by Imaizumi merely to provide significant damping in both the upstroke and down stroke.

Re claims 14 and 21, see ring 16, which is inherently self-lubricating and greased in order to allow for the piston to travel up and down in the chamber.

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Re claims 16-18, see ring 13 and elastomer 16.

Re claim 19, see Fig. 2.

Re claim 20, see above rejection re claim 1.

Re claims 23-25, see ring 13 and elastomer 16.

Re claim 26, see above rejection re claim 1.

Re claim 27, see chamber 23.

Re claim 28, see above rejection re claim 1.

***Claim Rejections - 35 USC § 103***

4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (4881723) in view of Imaizumi (4503951) and further in view of Bell (US 6725983).

Bauer et al as modified by Imaizumi fails to disclose a check valve for providing inflow of atmospheric air. Bell discloses introducing atmospheric air into a damper for adjusting the characteristics of the damper. It would have been obvious to one of ordinary skill in the art to which the invention pertains at the time the invention was made to have provided a valve according to Bell in a damper according to Bauer et al as modified by Imaizumi in order to provide adjustability and account for leakage.

***Allowable Subject Matter***

6) Claims 1, 3-4 and 6-11 would be allowed if amended to overcome the claim objections above.

7) Claims 13 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8) Applicant's arguments filed 7/5/05 have been fully considered but they are not persuasive. Applicant's argue that the combination of Bauer et al in view of Imaizumi is improper. Applicant argues the fact that Imaizumi does not teach a pneumatic damper and therefore the valve of Imaizumi cannot be combined into the device of Bauer.

Please note that there are many valve devices in the damper / shock absorber art that allow fluid to pass around or through a piston. In the instant case, the valve of Imaizumi can be used in either a pneumatic or hydraulic system and there for can be incorporated into the device of Bauer. Please note that both devices are dampers.

***Conclusion***

9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C. Kramer whose telephone number is 571-272-7118. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devon C Kramer  
Examiner  
Art Unit 3683

DK

**DEVON C. KRAMER**  
**PATENT EXAMINER**

*Devon Kramer*  
*7/22/05*